

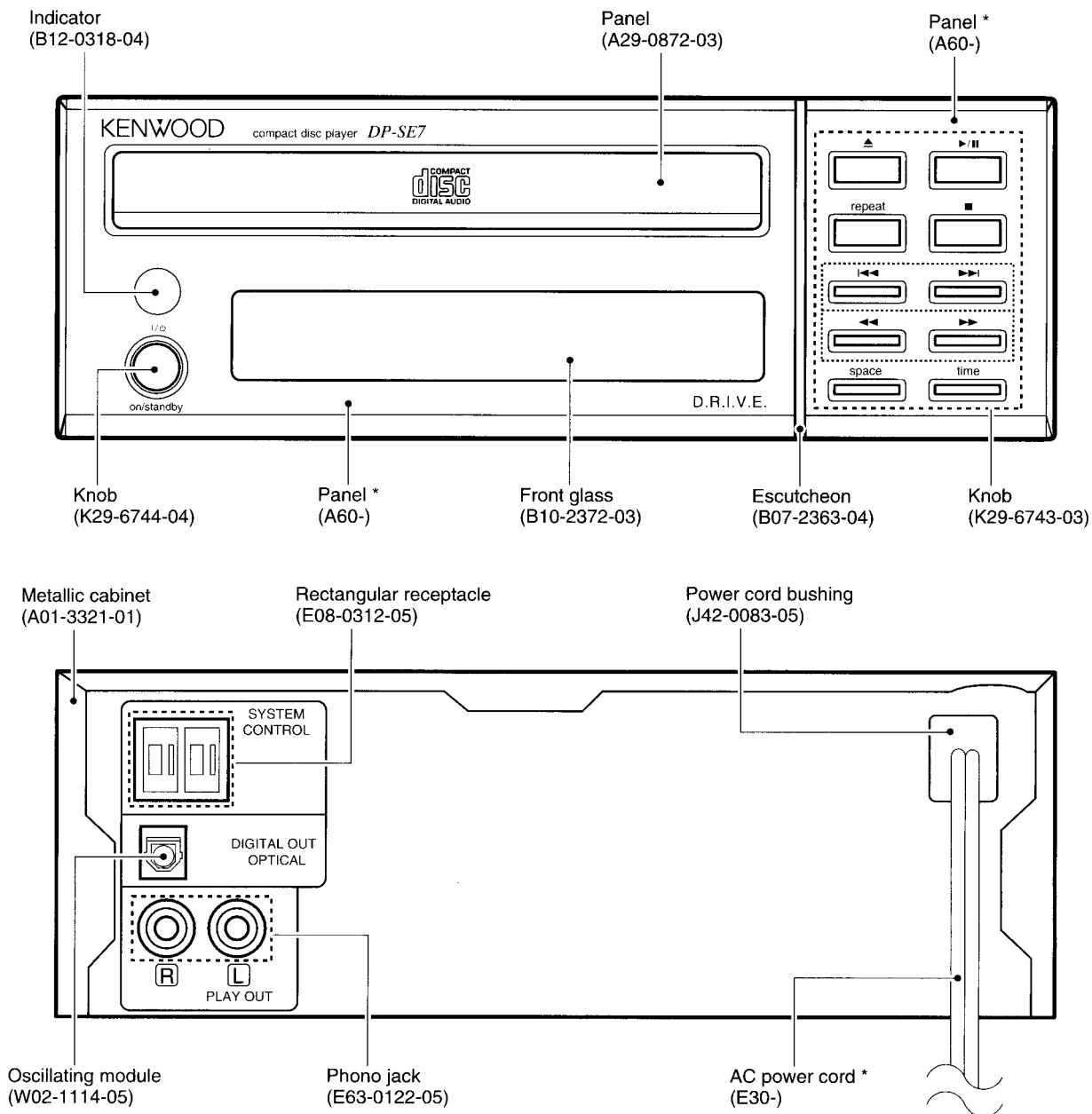
DP-SE7/SE7(G)/SE9

SERVICE MANUAL

(HM-701)

KENWOOD

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In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD-Crop. certifies this equipment conforms to DHHS Regulations No. 21 DFR 1040. 10, Chapter 1, Subchapter J.

**DANGER : Laser radiation when open and interlock defeated.
AVOID DIRECT EXPOSURE TO BEAM**

Illustration is DP-SE7Mtype.

* Refer to parts list on page 17.

Refer to DP-SA7 service manual (B51-5243-00) if you require Disassembly for repair in detail.

DP-SE7/SE7(G)/SE9

CONTENTS / EXTERNAL VIEW

Contents

CONTENTS / EXTERNAL VIEW	2	SCHEMATIC DIAGRAM	9
CIRCUIT DESCRIPTION	3	EXPLODED VIEW	15
ADJUSTMENT	6	PARTS LIST	17
PC BOARD	7	SPECIFICATIONS	Back cover

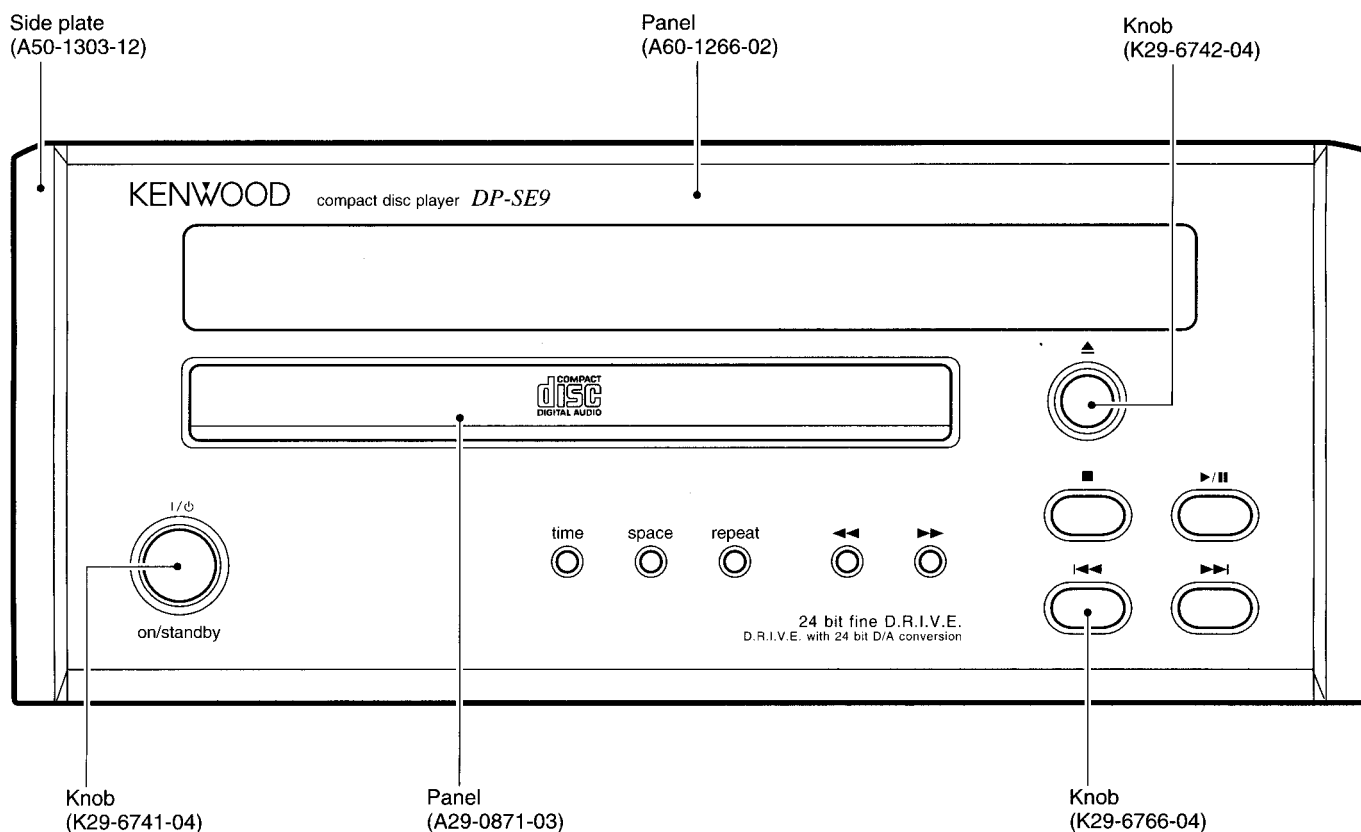


Illustration is DP-SE9.

System configuration

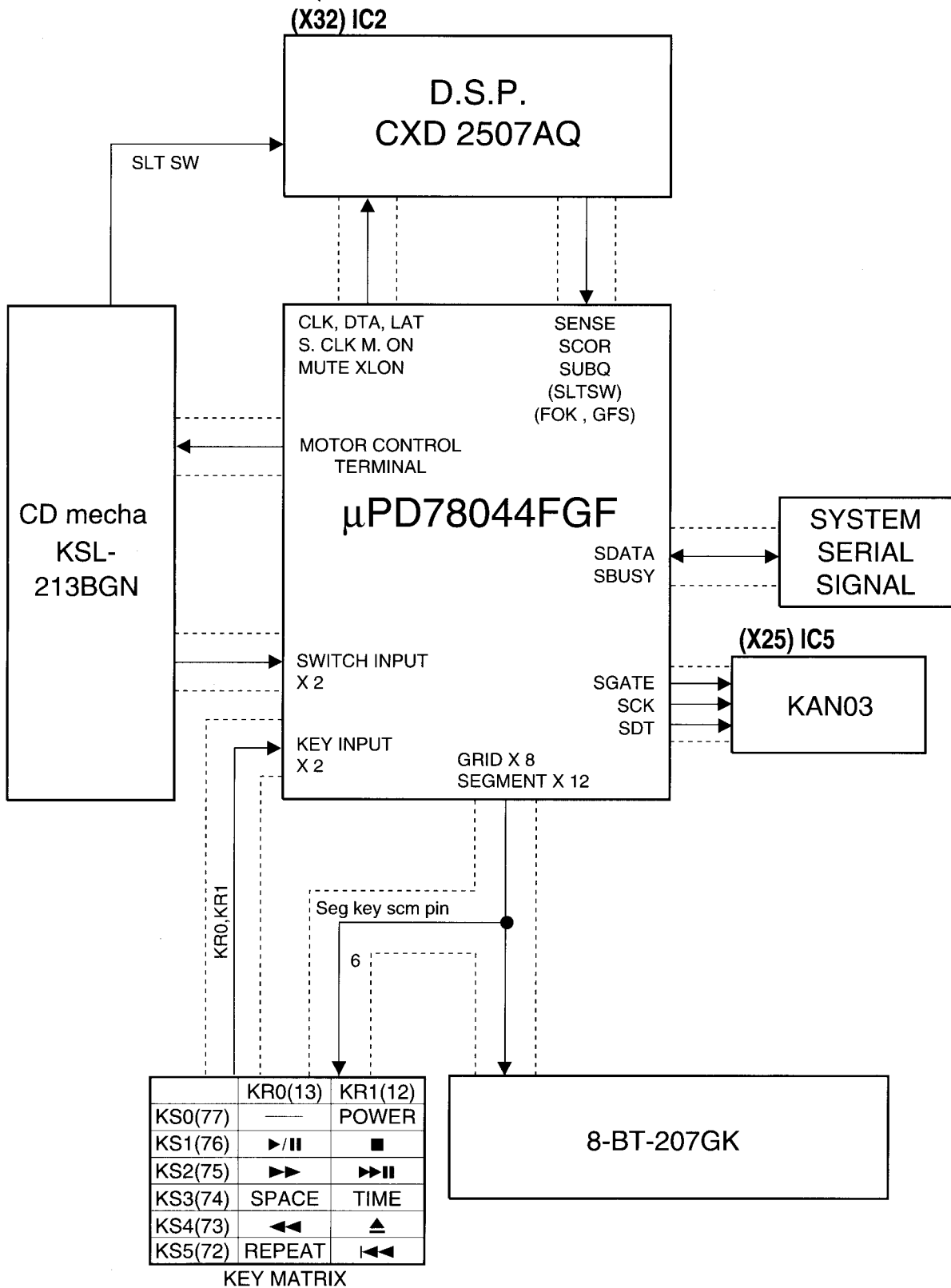
SYSTEM NAME	RECEIVER	CD PLAYER	SPEAKER
HM-701	R-SE7	DP-SE7	LS-SE7
HM-901	R-SE9	DP-SE9	LS-SE9

DP-SE7/SE7(G)/SE9

CIRCUIT DESCRIPTION

1. Microprocessor

1-1. Microprocessor periphery block diagram



DP-SE7/SE7(G)/SE9

CIRCUIT DESCRIPTION

1-2 Pin description

(uPD78044FGF-071 : X25, IC4)

PIN No.	PIN NAME	I/O	DESCRIPTION
1~7	Grid 2G~8G	O	FL Digit control (Grid 2G~8G)
8	Vdd	O	Power supply (+5)
9	SQCK	O	Q-data read clock output.
10	STBY	O	Not use (OPEN)
11	SUBQ	I	Q-data (or SLT SW) input
12	KR 1	I	Key return input 1
13	KR 0	I	Key return input 0
14~16	NC	I	Not use (PULL DOWN)
17	RESET	I	Reset input
18, 19	NC	I	Not use (PULL DOWN)
20	AVss	-	Not use (GND)
21~24	NC	I	Not use (PULL DOWN)
25	SDT	O	Enable output to KAN03
26	SCK	O	Clock output to KAN03
27	S GATE	O	Data output for KAN03
28	NC	I	Not use
29	AVdd	-	Not use (+5V)
30	AVref	-	Not use (GND)
31	DEFECT	I	Scratch disk compel sat
32	XT2	-	Not use (OPEN)
33	Vss	-	GND
34	X1	I	System clock
35	X2	-	System clock
36	RMUTE	O	Analog mute
37	CLK	O	CXD2507AQ clock output
38	LATCH	O	CXD2507AQ latch output
39	DATA	O	CXD2507AQ data output
40	SENSE	I	SENSE/GFS/F.OK input
41	D.S	O	Not use
42	S.DATA	I/O	Serial DATA I/O
43	S.BUSY	I/O	Serial BUSY I/O
44	SCOR	I	Sub-code synch detect
45	NC	I	Not use (PULL DOWN)
46	M.ON	O	Focus lock compensation
47	REMOCON	I	REMOCON
48	Vpp	-	GND
49	CLOSE SW	I	Tray close (L : close)
50	OPEN SW	I	Tray open (L : open)
51	NC	I	Not use (PULL DOWN)
52	Vdd	-	Power supply (+5V)
53	OPEN MOTOR	O	Motor [OPEN] (H : OPEN/T.U.DOWN)
54	CLOSE MOTOR	O	Motor [CLOSE] (H : CLOSE/T.U.UP)
55~64	NC	O	Not use (OPEN)
65~70	Sa~Sf	O	FL Segment (SEG Sa~Sf)
71	Vlrd	-	FL driver power supply (-30V)
72~77	SEG Sg~Sl/KS 5~0	O	FL Segment Sg~Sl and key scan (KS5~KS0)
78, 79	NC	O	Not use (open)
80	GRID 1G	O	FL digit (Grid 1G)

CIRCUIT DESCRIPTION

2. Test mode

MODE "0 0" : Use for Test or alignment				
Setting the test mode : While pressing the "REPEAT" key, plug the AC cord into wall output.				
No.	Key	Display	Operation	Remarks
1	PLAY/ PAUSE ▶/⏸	03	(1)Focus servoON (2) Tracking servoOFF (3) Feed servoOFF	TE-adjustment
		05	(1) Focus servoON (2) Tracking servoON (3) Feed servoON	F-GAIN / T-GAIN FE-B adjustment
2	UP ▶▶		<input type="checkbox"/> All display ON → All display OFF	
3	FB ◀◀	01	Pick manual feed (outside → inside)	Stop mode only Time display goes off
		05	FB operation is available	
4	FF ▶▶	01	Pick manual feed(inside → outside)	Stop mode only Time display goes off
		05	FF operation is available	
5	STOP ■	01	Pick-up initialize	
6	OPEN / CLOSE ▲		Tray open / close	
7	DOWN ◀◀	01	Cancel the test mode, and return to normal mode.	Play track No.01

DP-SE7/SE7(G)/SE9

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	PLAYER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
While pressing the "REPEAT" key, turn the AC ON. { Refer to test mode (MODE 0 0) }							
1	LASER POWER	—	Apply the sensor section of optical power meter on the pickup lens.	Press the PLAY/PAUSE key, then confirm that the LED is "03".	—	On the power from 0.08 to 0.15 mW, when the diffraction grating is correctly aligned with the RF level of 0.6 Vp-p or more.	(a)
2	FOCUS ERROR BIAS	Test disc Type 4	Connect an oscilloscope as follows. CH1 : RF (CN3 pin 1) CH2 : TE (CN3 pin 6)	Press the PLAY/PAUSE key, then confirm that the LED is "05".	FE BIAS VR2	Optimum eye pattern	
3	TRACKING ERROR BALANCE	Test disc Type 4	Connect an oscilloscope as follows. CH1 : RF (CN3 pin 1) CH2 : TE (CN3 pin 6)	Press the PLAY/PAUSE key, then confirm that the LED is "03".	TE BALANCE VR1	Symmetry between upper and lower patterns	
4	TRACKING GAIN	Test disc Type 4 Apply signal of 1.2 kHz, 50mVrms to CN3 pin 5-6.	Connect a LPF to CN3 pin 5-6 to which you connect an oscilloscope or AC voltmeters.	Press the PLAY/PAUSE key, then confirm that the LED is "05".	TRACKING GAIN VR3	Two VTVMs should read the same value.	(e)

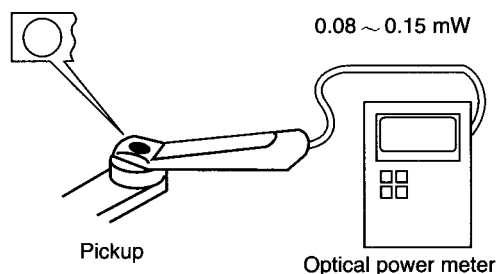
Note:

Type 4 disc : SONY YEDS-18 Test Disc or equivalent.(KTD-0*)

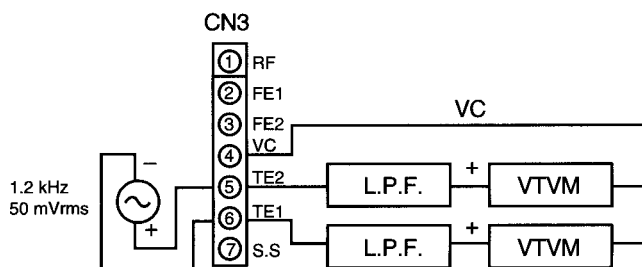
LPF: Around 47 kΩ+ 390 pF or so.

Step 1~4 are in Test Mode.

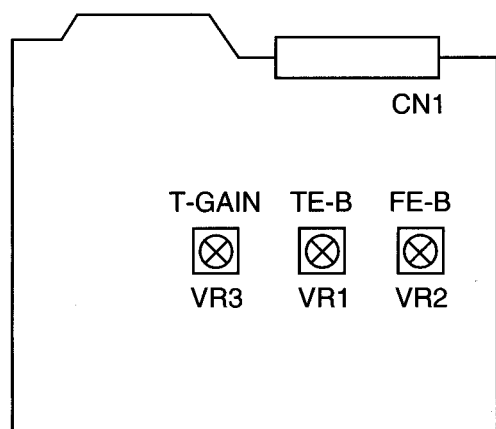
(a) Laser power



(e) Tracking gain



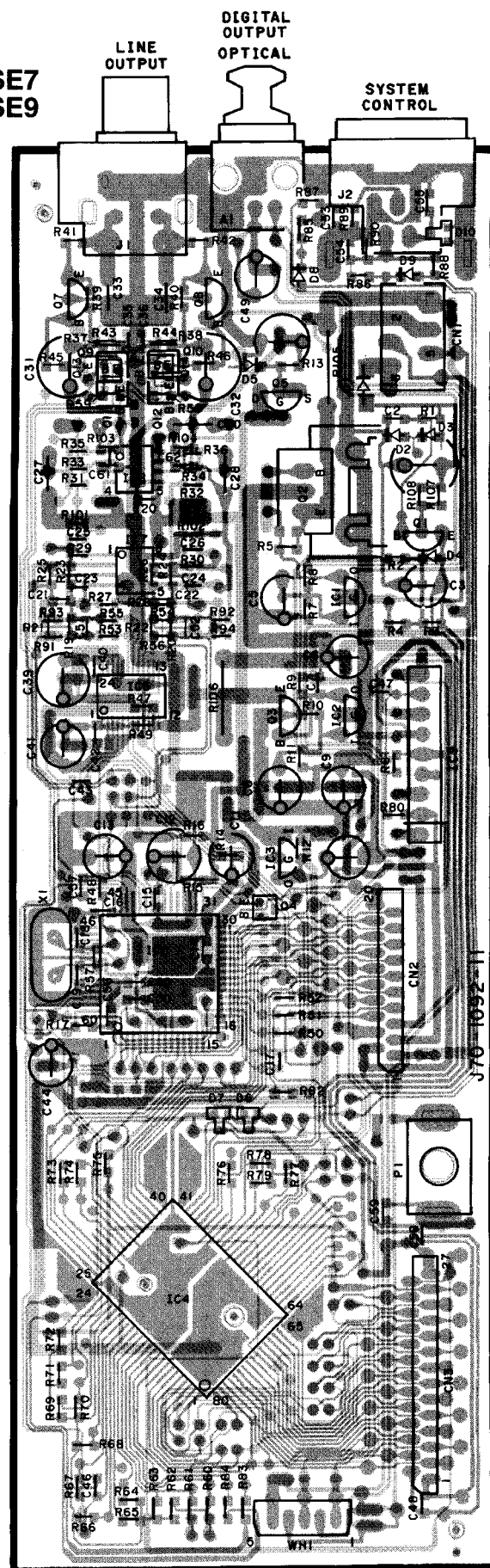
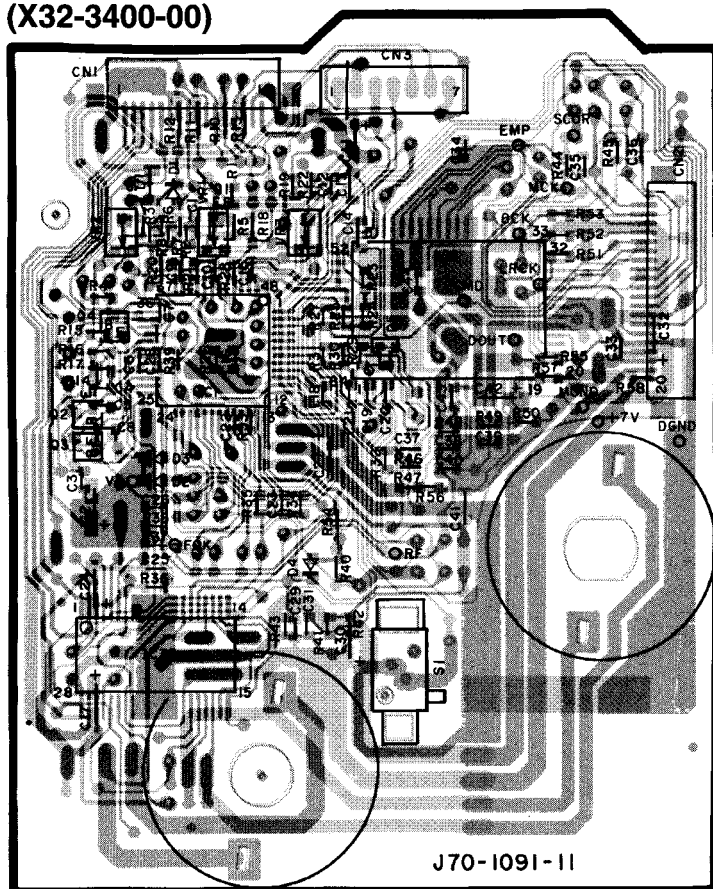
ALIGNMENT POINTS

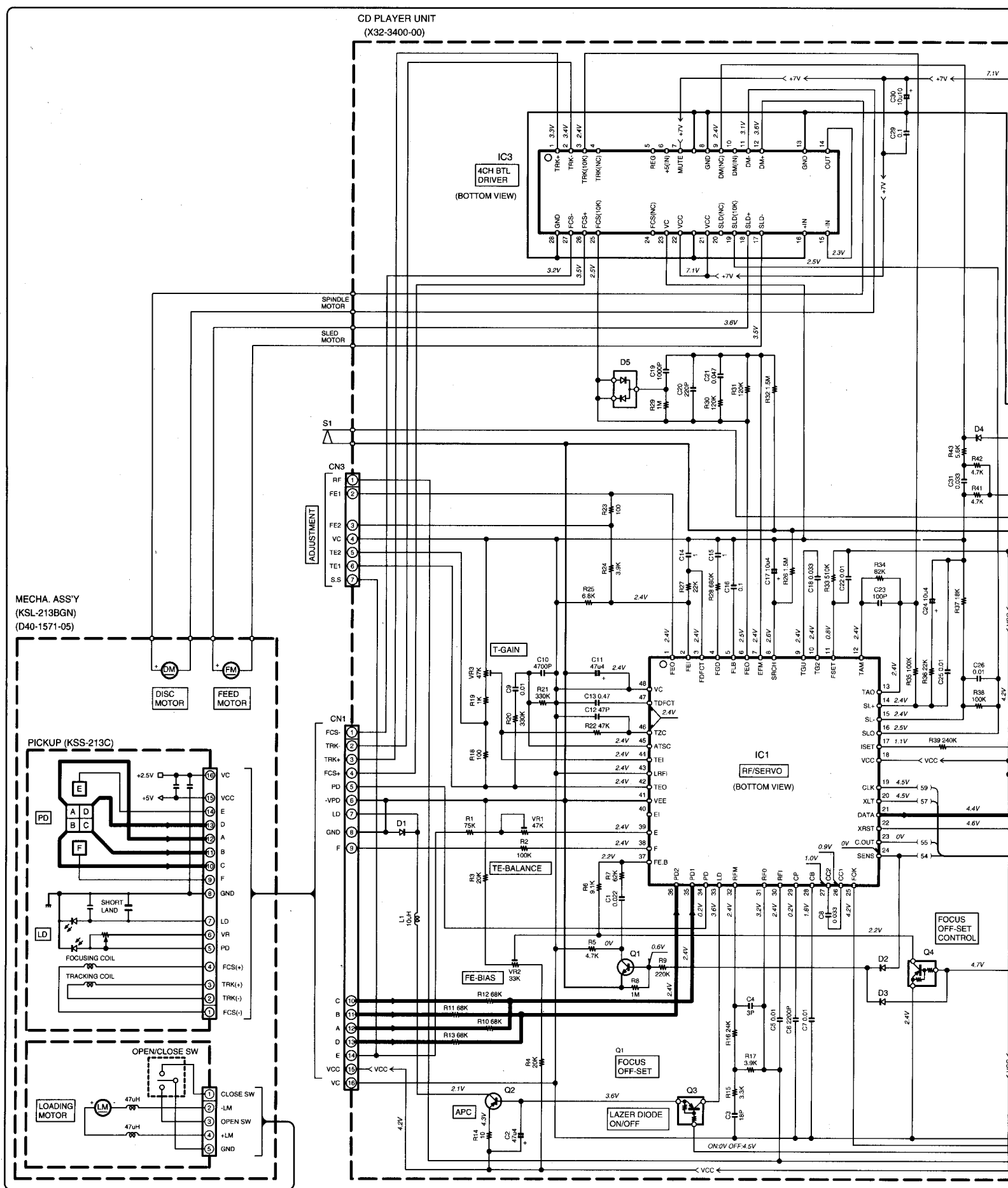


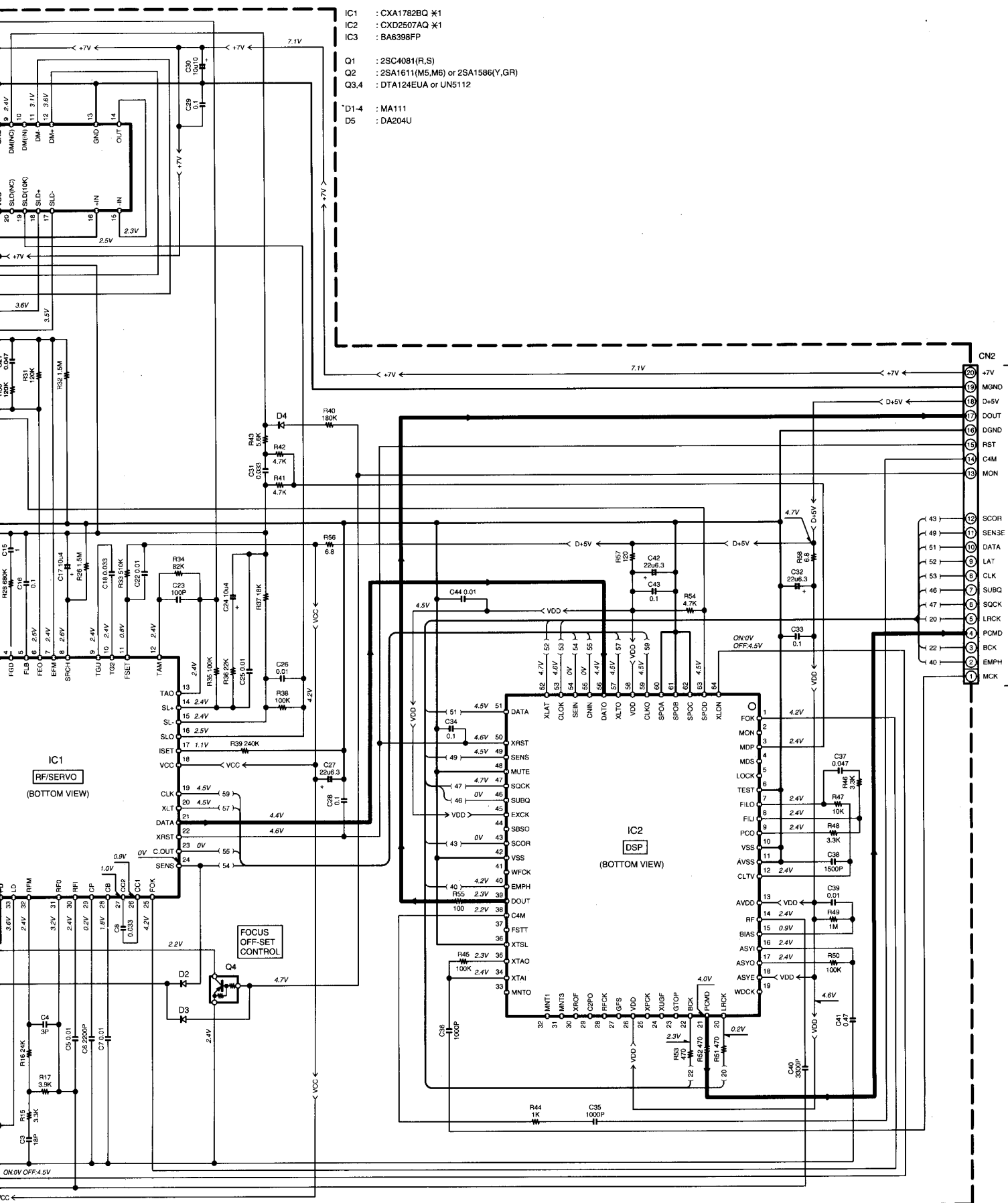
PC BOARD(Component side view)

ELECTRIC UNIT
 (X25-6000-00) : DP-SE7
 (X25-6000-01) : DP-SE9

CD PLAYER UNIT
 (X32-3400-00)





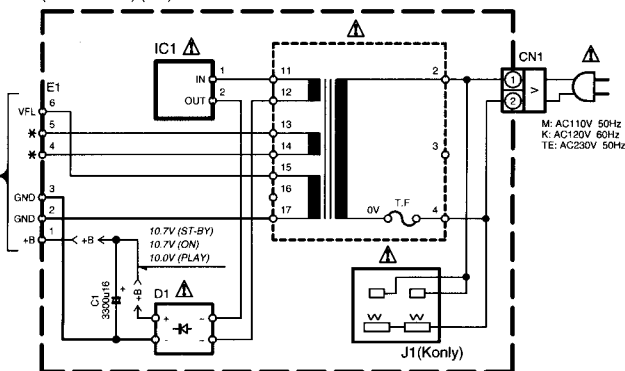


INVERTER
(EMPH CONT.)

MODEL NAME	UNIT No.	1pin	2pin
DP-SE7/SE7(G)	X14-4520-21	F1	F2
DP-SE9	X14-4530-21	F2	F1

MODEL NAME	UNIT No.	4pin	5pin
DP-SE7/SE7(G)	X14-4520-21	F1	F2
DP-SE9	X14-4530-21	F2	F1

(X14-4520-21) (A/2) : DP-SE7/DP-SE7(G)
(X14-4530-21) (B/2) : DP-SE9



MODEL NAME	UNIT No.	4pin	5pin
DP-SE7/SE7(G)	X14-4520-21	F1	F2
DP-SE9	X14-4530-21	F2	F1

DP-SE9 (X25-6000-01)

DESTINATION	ABB.	UNIT No.	IC6	Q4	D3	A	B	R50-52	C23-26	C27-28
COUNTRY										
GENERAL MARKET	M									
U.K.	T	-00	YES	YES	UDZ15B	YES	NO	YES	220P	2700P
EUROP	E									

DP-SE7 (X25-6000-00)

DESTINATION	ABB.	UNIT No.	IC6	Q4	D3	A	B	R50-52	C23-26	C27-28
COUNTRY										
GENERAL MARKET	M									
U.K.	T	-00	NO	NO	UDZ13B	NO	YES	NO	100P	3300P
EUROP	E									
USA	K									

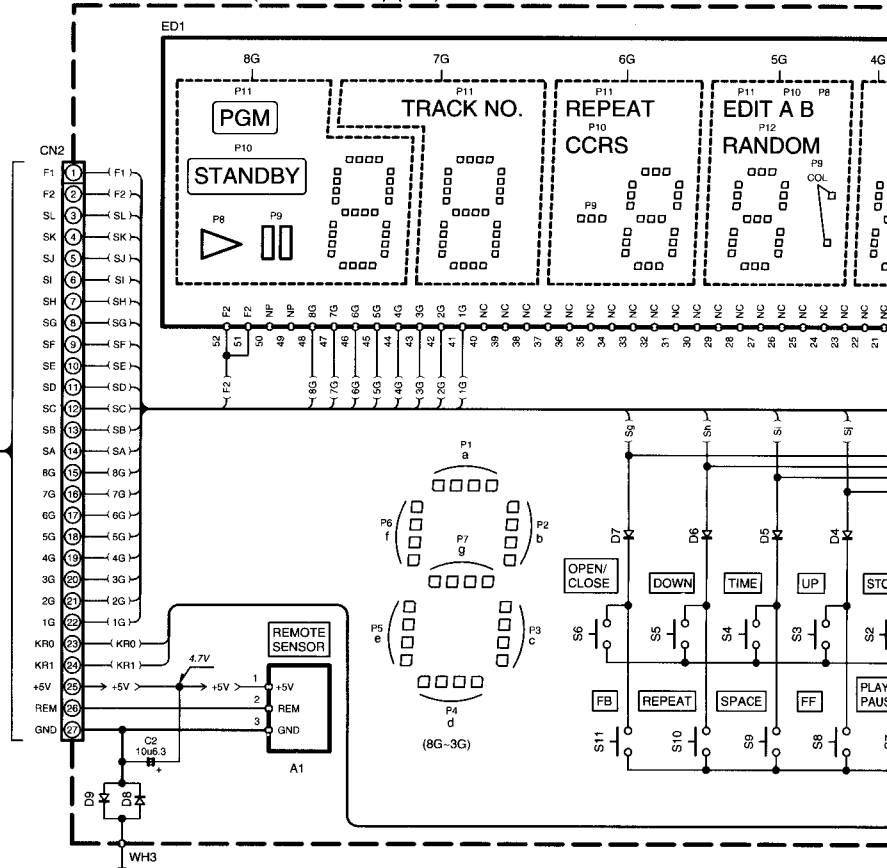
DP-SE7(G) (X25-6000-00)

DESTINATION	ABB.	UNIT No.	IC6	Q4	D3	A	B	R50-52	C23-26	C27-28
COUNTRY										
U.K.	T	-00	NO	NO	UDZ13B	NO	YES	NO	100P	3300P

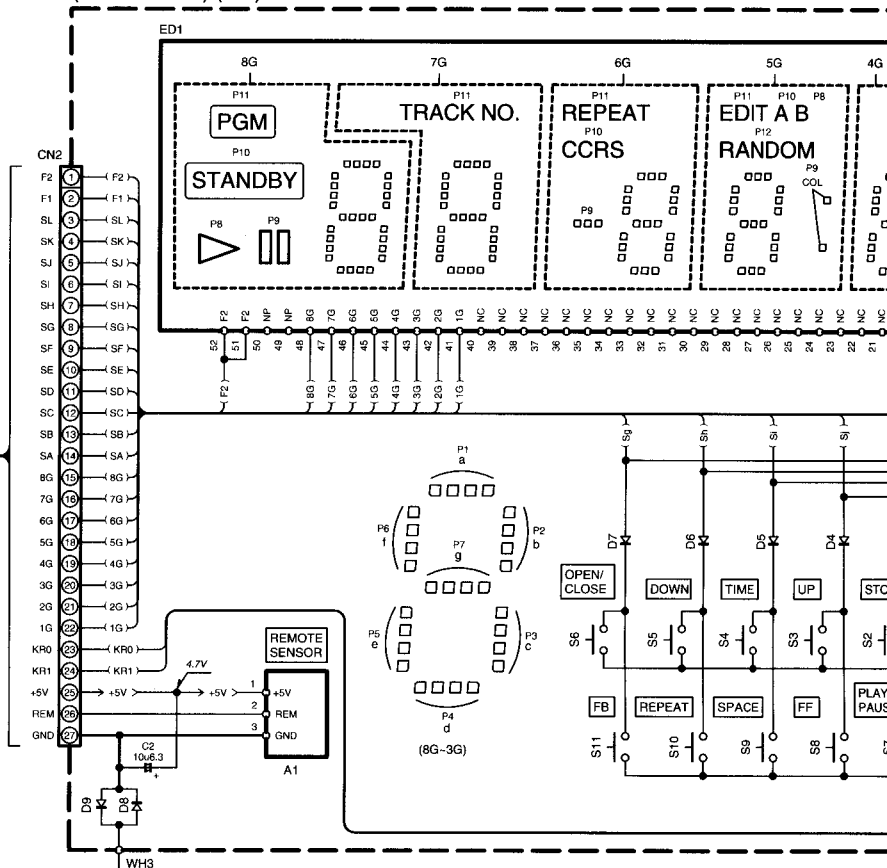
IC1,2 : M5237L
IC3 : PST933D-T
IC4 : uPD78044FGF071
IC5 : KAN03
IC6 : AK4324-VF
IC7,8 : NJM2100M
IC9 : TA8409S
Q1 : 2SA954(L,K)
Q2 : 2SB1370 or 2SB1375
Q3 : 2SC3940A(R,S)
Q4,9,10 : DTC124EUA or UN5212
Q5 : 2SK246(Y,GR)
Q7,8 : 2SD1450(S,T)
Q11,12 : DTA124EUA or UN5112
Q13,14 : 2SA1611(M5,M6) or 2SA1586(Y,GR)

D1 : S5688B or 1SR139-400
D2 : UDZ15B
D3 : *
D4 : UDZ5.1B
D5 : UDZ2.7B
D6,7,10 : DA204U
D8,9 : MA111

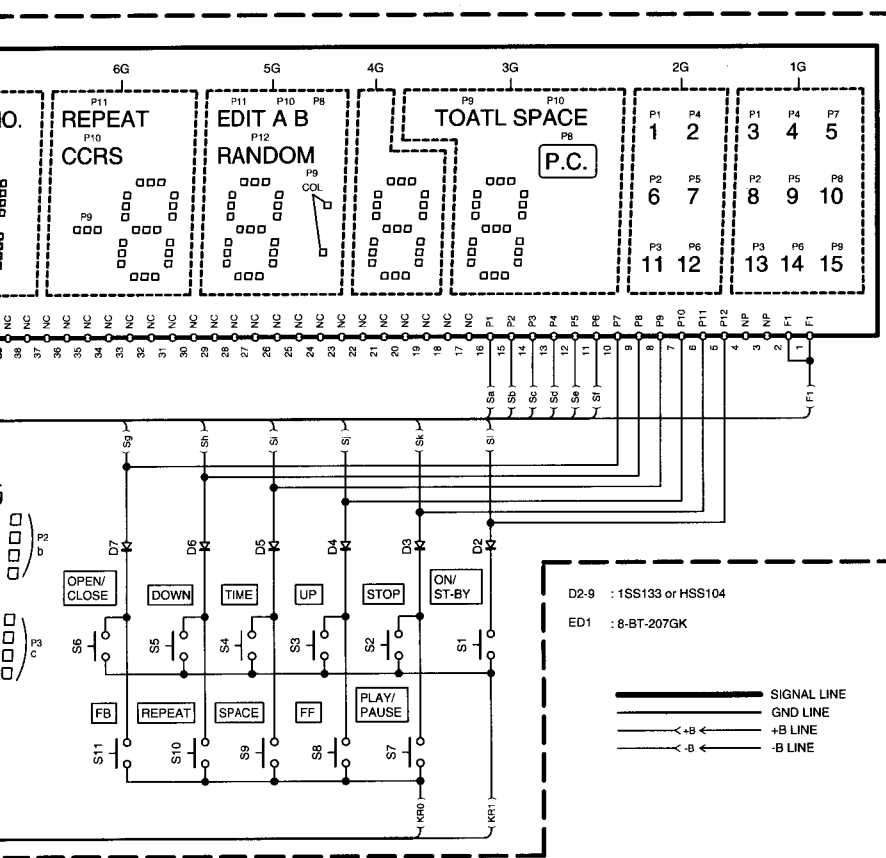
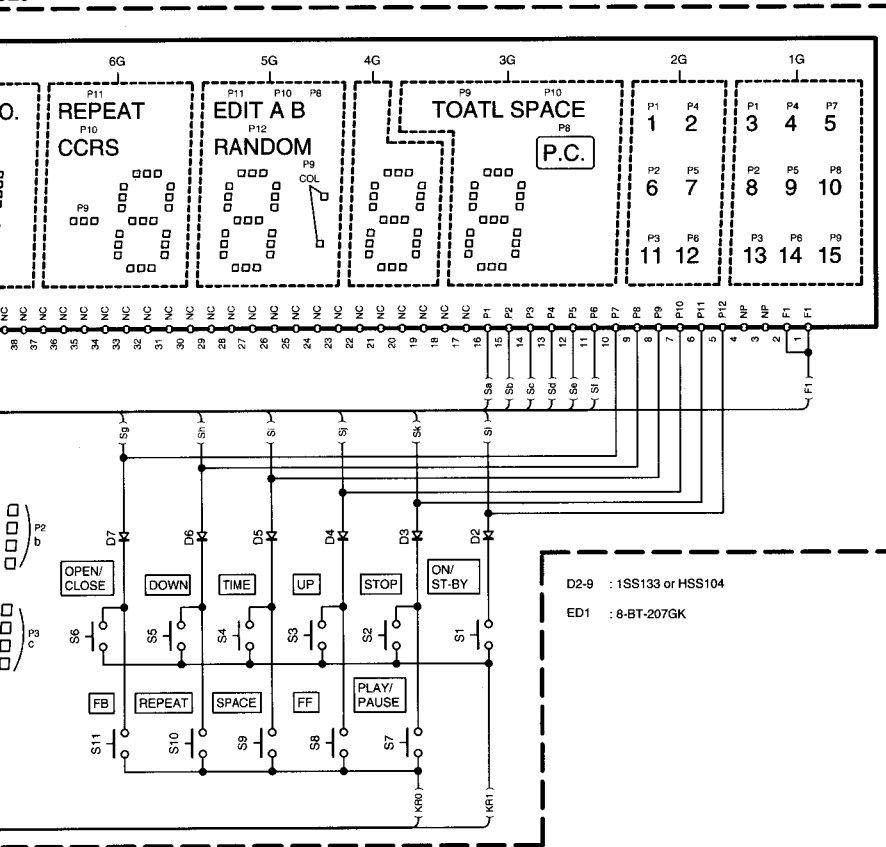
DISPLAY UNIT (X14-4520-21) (B/2) : DP-SE7/DP-SE7(G)
(X14-4530-21) (B/2) : DP-SE9



DISPLAY UNIT (X14-4530-21) (A/2) : DP-SE9



DP-SE7/DP-SE7(G)

SE7/DP-SE7(G)
SE9

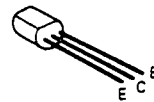
DP-SE7/DP-SE7(G)/DP-SE9

— SIGNAL LINE
 — GND LINE
 — +B LINE
 — -B LINE

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter. The measurement value may vary depending on the measuring instruments used or on the product. Refer to the voltage during PLAY unless otherwise specified; The value shown in () is the voltage measured at the moment of STOP.

2SA1534A
 2SA954
 2SC2878



2SA1586
 2SC4081



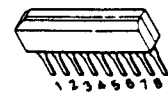
2SB1370



2SB1375



TA8409S



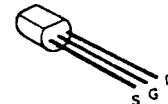
DA204U



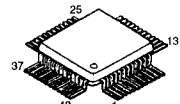
UN5212



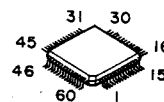
2SK246



CXA1782BQ*1



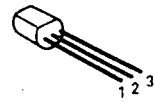
KAN03



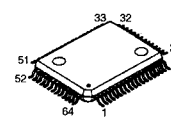
BA6398FP



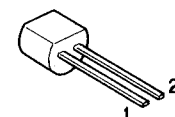
M5237L



CXD2507AQ*1



ICP-N25



DP-SE7/SE7(G)/SE

KENWOOD



Parts with exploded numbers larger than 700 are not supplied.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

1

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
DP-SE7/SE7(G)						
601	1D		A01-3321-01	METALLIC CABINET		
603	2D		A22-1778-11	SUB PANEL		
604	2C		A29-0872-03	PANEL		
606	2C		A60-1199-13	PANEL	MT1T2E	
606	2C	*	A60-1345-03	PANEL	K	
607	2D		A60-1200-03	PANEL	MT1EK	
607	2D		A60-1298-03	PANEL (GOLD)	T2	
615	2D		B07-2363-04	ESCUTCHEON		
616	2D		B10-2372-03	FRONT GLASS		
617	2C		B12-0318-04	INDICATOR		
-			B46-0328-03	WARRANTY CARD	K	
Δ 626	1E		E30-2592-15	AC POWER CORD	ME	
Δ 626	1E		E30-2650-05	AC POWER CORD	K	
Δ 626	1E		E30-2721-05	AC POWER CORD	T1T2	
628	2D,2E		E35-1983-05	FLAT CABLE 27P		
629	1E,2E		E35-1984-05	FLAT CABLE 20P		
630	1E		E35-1985-05	FLAT CABLE 16P		
640	2E		G11-2283-04	CUSHION		
641	2D		G11-2284-04	CUSHION		
642	2D		G11-2342-04	CUSHION		
-			H10-7355-02	POLYSTYRENE FOAMED FIXTURE		
-			H10-7356-02	POLYSTYRENE FOAMED FIXTURE	T1T2	
-			H12-2359-04	PACKING FIXTURE	EK	
-			H25-1579-04	PROTECTION BAG	T1T2	
-			H25-1581-04	PROTECTION BAG		
-			H25-1620-04	PROTECTION BAG	M	
-			H50-2498-04	ITEM CARTON CASE	MEK	
-		*	H50-2500-04	ITEM CARTON CASE	T1	
-		*	H50-2566-04	ITEM CARTON CASE	T2	
Δ 645	2E		J02-0370-05	FOOT		
Δ 648	1E		J42-0083-05	POWER CORD BUSHING	MT1T2E	
-			J61-0307-05	WIRE BAND		
650	2D		K29-6743-03	KNOB		
651	2D		K29-6744-04	KNOB		POWER
Δ 655	1E	*	L07-2436-05	POWER TRANSFORMER	M	
Δ 655	1E	*	L07-2437-05	POWER TRANSFORMER	T1T2E	
Δ 655	1E	*	L07-2505-05	POWER TRANSFORMER	K	
S1			S74-0065-05	LEAF SWITCH		
DP-SE9						
601	1D		A01-3465-01	METALLIC CABINET		
603	1C		A22-1777-01	SUB PANEL		
604	2C		A29-0871-03	PANEL		
606	2C	*	A60-1266-02	PANEL		
611	1D		A50-1303-02	SIDE PLATE		
616	2C		B10-2370-03	FRONT GLASS		
Δ 626	1E		E30-2592-15	AC POWER CORD	ME	
Δ 626	1E		E30-2721-05	AC POWER CORD	T	
628	2D,2E		E35-1983-05	FLAT CABLE 27P		
629	1E,2E		E35-1984-05	FLAT CABLE 20P		

L : Scandinavia K : USA P : Canada R : Mexico T1 : GRAY
Y : PX(Far East, Hawaii) T : Europe E : Europe G : Germany T2 : GOLD
Y : AAFES(Europe) X : Australia M : Other Areas

Δ indicates safety critical components.

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2

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
630	1E		E35-1985-05	FLAT CABLE 16P		
641	2C		G11-2352-04	CUSHION PANEL		
642	2C		G11-2325-04	CUSHION FOOT		
643	2C		G11-2353-04	CUSHION SIDE PLATE		
-			H10-7353-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H10-7354-02	POLYSTYRENE FOAMED FIXTURE		
-			H12-2356-04	PACKING FIXTURE	T	
-			H25-1579-04	PROTECTION BAG	E	
-			H25-1581-04	PROTECTION BAG	T	
-			H25-1620-04	PROTECTION BAG	M	
-		*	H50-2495-04	ITEM CARTON CASE	ME	
-		*	H50-2496-04	ITEM CARTON CASE	T	
Δ 645	2E		J02-0370-05	FOOT		
Δ 648	1E		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
651	2C		K29-6741-04	KNOB		POWER
652	2C		K29-6742-04	KNOB		
653	2C		K29-6766-04	KNOB		
Δ 655	1E	*	L07-2436-05	POWER TRANSFORMER	M	
Δ 655	1E	*	L07-2437-05	POWER TRANSFORMER	TE	
S1			S74-0065-05	LEAF SWITCH		
DISPLAY UNIT (X14-45xx-xx)						
C1			CE04KW1C332M	ELECTRO 3300UF 16WV		
C2			C90-3209-05	ELECTRO 10UF 6.3WV		
CN1			E40-4632-05	PIN ASSY		
CN2			E40-9965-05	FLAT CABLE CONNECTOR		
Δ J1			E03-0148-05	AC OUTLET	K	
S1 -11			S70-0031-05	TACT SWITCH		
Δ D1			KBP02ML-6127	DIODE		
D2 -7			HSS104	DIODE		
D2 -7			1SS133	DIODE		
D8 ,9			HSS104	DIODE		
D8 ,9			1SS133	DIODE		7 7
ED1			8-BT-207GK	INDICATOR TUBE		
Δ IC1			ICP-N25	ANALOGUE IC		
A1			W02-2537-05	ELECTRIC CIRCUIT MODULE		
A1			W02-2561-05	ELECTRIC CIRCUIT MODULE		9 7
DECK UNIT (X25-6000-xx)						
C1			CE04KW1H101M	ELECTRO 100UF 50WV		
C2			CK73FB1H103K	CHIP C 0.010UF K		
C3			CE04KW1H100M	ELECTRO 10UF 50WV		
C5			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C6			CE04KW1A221M	ELECTRO 220UF 10WV		
C7			CK73FB1H473K	CHIP C 0.047UF K		
C8			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C9			CE04KW1A101M	ELECTRO 100UF 10WV		
C10			CE04KW0J331M	ELECTRO 330UF 6.3WV		
C11			CE04KW1A101M	ELECTRO 100UF 10WV		
C12			CE04KW0J331M	ELECTRO 330UF 6.3WV		

L : Scandinavia K : USA P : Canada R : Mexico 7 : DP-SE7
Y : PX(Far East, Hawaii) T : Europe E : Europe G : Germany 9 : DP-SE9
Y : AAFES(Europe) X : Australia M : Other Areas

Δ indicates safety critical components.

PARTS LIST

DP-SE7/SE7(G)/SE9

* New Parts

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③

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C13 C14 -16 C17 C18 ,19 C20			CE04KW1A101M CK73FB1E104K CK73FB1H103K CC73FSL1H150J CK73FB1E104K	ELECTRO 100UF 10WV CHIP C 0.10UF K CHIP C 0.010UF K CHIP C 15PF J CHIP C 0.10UF K		
C21 -26 C23 -26 C27 ,28 C27 ,28 C29 ,30			CC73FSL1H101J CC73FSL1H221J CQ93FMG1H272J CQ93FMG1H332J CQ93FMG1H391K	CHIP C 100PF J CHIP C 220PF J MYLAR 2700PF J MYLAR 3300PF J MYLAR 3900PF K	7 9 9 7	
C31 ,32 C33 ,34 C35 ,36 C39 C40			C90-3749-05 CQ93FMG1H471J CK73FB1H103K CE04KW0J331M CK73FB1E104K	ELECTRO 47UF 16WV MYLAR 470PF J CHIP C 0.010UF K ELECTRO 330UF 6.3WV CHIP C 0.10UF K	9 9	
C41 C42 C43 C44 C46			CE04KW1A101M CK73FB1E104K CK73FB1H103K CE04KW1A101M CK73FB1H103K	ELECTRO 100UF 10WV CHIP C 0.10UF K CHIP C 0.010UF K ELECTRO 100UF 10WV CHIP C 0.010UF K	9 9 9	
C47 C48 C49 C50 C51 ,52			CK73FB1E104K CK73FB1H103K CE04KW1A101M CC73FCH1H330J CC73FSL1H221J	CHIP C 0.10UF K CHIP C 0.010UF K ELECTRO 100UF 10WV CHIP C 33PF J CHIP C 220PF J	9	
C53 ,54 C55 C56 C57 C58 -60			CC73FSL1H221J CK73FB1H103K CC73FSL1H101J CC73FSL1H220J CK73FB1H103K	CHIP C 220PF J CHIP C 0.010UF K CHIP C 100PF J CHIP C 22PF J CHIP C 0.010UF K	9	
C61 ,62			CC73FSL1H101J	CHIP C 100PF J		
CN1 CN2 CN3 J1 J2			E40-4296-05 E40-9875-05 E40-9966-05 E63-0122-05 E08-0312-05	FLAT CABLE CONNECTOR FLAT CABLE CONNECTOR FLAT CABLE CONNECTOR PHONO JACK RECTANGULAR RECEPTACLE		
P1			J21-5845-04	MOUNTING HARDWARE		
X1			L77-2217-05	CRYSTAL RESONATOR(16.9344MHZ)		
R1 R2 R3 ,4 R5 R7			RK73FB2A472J RK73FB2A103J RK73FB2A181J RK73FB2A221J RK73FB2A203J	CHIP R 4.7K J 1/10W CHIP R 10K J 1/10W CHIP R 180 J 1/10W CHIP R 220 J 1/10W CHIP R 20K J 1/10W		
R8 R9 R10 R11 R12			RK73FB2A432J RK73FB2A181J R92-1867-05 R92-1868-05 RK73FB2A103J	CHIP R 4.3K J 1/10W CHIP R 180 J 1/10W METAL 12K F 1/10W METAL 4.3K F 1/10W CHIP R 10K J 1/10W		
R13 R14 R15 R16 R17			RK73FB2A101J RK73FB2A100J RK73FB2A221J RK73FB2A510J RK73FB2A101J	CHIP R 100 J 1/10W CHIP R 10 J 1/10W CHIP R 220 J 1/10W CHIP R 51 J 1/10W CHIP R 100 J 1/10W		

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
R18 R19 -30 R27 -30 R31 ,32 R33 ,34			RK73FB2A103J RK73FB2A103J RK73FB2A332J RK73FB2A472J RK73FB2A152J	CHIP R 10K J 1/10W CHIP R 10K J 1/10W CHIP R 3.3K J 1/10W CHIP R 4.7K J 1/10W CHIP R 1.5K J 1/10W		7 9
R35 ,36 R37 ,38 R39 ,40 R41 ,42 R43 ,44			RK73FB2A103J RK73FB2A104J RK73FB2A102J RK73FB2A101J RK73FB2A122J	CHIP R 10K J 1/10W CHIP R 100K J 1/10W CHIP R 1.0K J 1/10W CHIP R 100 J 1/10W CHIP R 1.2K J 1/10W		
R45 ,46 R47 R48 R49 R50 -52			RK73FB2A102J RK73FB2A2R2J RK73FB2A101J RK73FB2A240J RK73FB2A471J	CHIP R 1.0K J 1/10W CHIP R 2.2 J 1/10W CHIP R 100 J 1/10W CHIP R 24 J 1/10W CHIP R 470 J 1/10W		9 9 9 9
R53 -56 R57 R58 ,59 R60 ,61 R62 -74			RK73FB2A472J RK73FB2A105J RK73FB2A223J RK73FB2A472J RK73FB2A473J	CHIP R 4.7K J 1/10W CHIP R 1.0M J 1/10W CHIP R 22K J 1/10W CHIP R 4.7K J 1/10W CHIP R 47K J 1/10W		9
R75 R76 ,77 R78 ,79 R80 R81			RK73FB2A104J RK73FB2A473J RK73FB2A472J RK73FB2A103J RK73FB2A473J	CHIP R 100K J 1/10W CHIP R 47K J 1/10W CHIP R 4.7K J 1/10W CHIP R 10K J 1/10W CHIP R 47K J 1/10W		
R82 -84 R85 ,86 R87 -90 R91 -94 R101-104			RK73FB2A101J RK73FB2A331J RK73FB2A104J RK73FB2A472J RK73FB2A101J	CHIP R 100 J 1/10W CHIP R 330 J 1/10W CHIP R 100K J 1/10W CHIP R 4.7K J 1/10W CHIP R 100 J 1/10W		9
R105 R106 R107,108			RD14GB2E2R2J RD14GB2E1R0J RK73FB2A220J	FL-PROOF RD 2.2 J 1/4W FL-PROOF RD 1 J 1/4W CHIP R 22 J 1/10W		
D1 D2 D3 D3 D4			1SR154-400 UDZ15B UDZ13B UDZ15B UDZ5.1B	DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE		7 9
D5 D6 ,7 D8 ,9 D10 IC1 ,2			UDZ2.7B DA204U MA111 DA204U M5237L	ZENER DIODE DIODE DIODE DIODE ANALOGUE IC		
IC3 IC4 IC5 IC6 IC7 ,8			PST993D-T UPD78044FGF071 KAN03 AK4324-VF NJM2100M	ANALOGUE IC MI-COM IC CUSTOM IC MOS-IC IC(OP AMPLIFIER)		9
IC9 Q1 Q2 Q2 Q3			TA8409S 2SA954(L,K) 2SB1370 2SB1375 2SA1534A	MOS-IC TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Q4			DTC124EUA	DIGITAL TRANSISTOR		9

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5

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
Q4 Q5 Q7 ,8 Q9 ,10 Q9 ,10			UN5212 2SK246(Y,GR) 2SC2878(B) DTC124EUA UN5212	DIGITAL TRANSISTOR FET TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR		9
Q11 ,12 Q11 ,12 Q13 ,14 Q13 ,14			DTA124EUA UN5112 2SA1586(Y,GR) 2SA1611(M5,M6)	DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR		
A1			W02-1114-05	OSCILLATING MODULE		
CD PLAYER UNIT (X32-3400-00)						
C1 C2 C3 C4 C5			CK73FB1H223K C92-0083-05 CC73FSL1H180J CC73FCH1H030C CK73FB1H103K	CHIP C CHIP C CHIP C CHIP C CHIP C	0.022UF 47UF 18PF 3.0PF 0.010UF	K 4WV J C K
C6 C7 C8 C9 C10			CK73FB1H222K CK73FB1H103K CK73FB1H333K CK73FB1H103K CK73FB1H472K	CHIP C CHIP C CHIP C CHIP C CHIP C	2200PF 0.010UF 0.033UF 0.010UF 4700PF	K K K K K
C11 C12 C13 C14 C15 ,16			C92-0083-05 CC73FSL1H470J CK73EB1C474K CK73EB1C105K CK73FB1E104K	CHIP C CHIP C CHIP C CHIP C CHIP C	47UF 47PF 0.47UF 1.0UF 0.10UF	4WV J K K K
C17 C18 C19 C20 C21			C92-0080-05 CK73FB1H333K CK73FB1H102K CC73FSL1H221J CK73FB1H473K	C ELECTOR CHIP C CHIP C CHIP C CHIP C	10UF 0.033UF 1000PF 220PF 0.047UF	4WV K K J K
C22 C23 C24 C25 ,26 C27			CK73FB1H103K CC73FSL1H101J C92-0080-05 CK73FB1H103K C92-0090-05	CHIP C CHIP C C ELECTOR CHIP C CHIP C	0.010UF 100PF 10UF 0.010UF 22UF	K J 4WV K 6.3WV
C28 ,29 C30 C31 C32 C33 ,34			CK73FB1E104K C92-0041-05 CK73FB1H333K C92-0090-05 CK73FB1E104K	CHIP C CHIP-ELE CHIP C CHIP C CHIP C	0.10UF 10UF 0.033UF 22UF 0.10UF	K 10WV K 6.3WV K
C35 ,36 C37 C38 C39 C40			CK73FB1H102K CK73FB1H473K CK73FB1H152K CK73FB1H103K CK73FB1H332K	CHIP C CHIP C CHIP C CHIP C CHIP C	1000PF 0.047UF 1500PF 0.010UF 3300PF	K K K K K
C41 C42 C43 C44			CK73EB1C474K C92-0090-05 CK73FB1E104K CK73FB1H103K	CHIP C CHIP C CHIP C CHIP C	0.47UF 22UF 0.10UF 0.010UF	K 6.3WV K K
CN1 CN2 CN3			E40-9963-05 E40-9964-05 E40-3251-05	FLAT CABLE CONNECTOR FLAT CABLE CONNECTOR PIN ASSY		

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5

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L1			L40-1001-31	SMALL FIXED INDUCTOR(10UH,K)		
R1 R2 R3 ,4 R5 R6			RK73FB2A753J RK73FB2A104J RK73FB2A203J RK73FB2A472J RK73FB2A912J	CHIP R CHIP R CHIP R CHIP R CHIP R	75K 100K 20K 4.7K 9.1K	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W
R7 R8 R9 R10 -13 R14			RK73FB2A623J RK73FB2A105J RK73FB2A224J RK73FB2A683J RK73FB2A100J	CHIP R CHIP R CHIP R CHIP R CHIP R	62K 1.0M 220K 68K 10	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W
R15 R16 R17 R18 R19			RK73FB2A332J RK73FB2A243J RK73FB2A392J RK73FB2A101J RK73FB2A102J	CHIP R CHIP R CHIP R CHIP R CHIP R	3.3K 24K 3.9K 100 1.0K	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W
R20 ,21 R22 R23 R24 R25			RK73FB2A334J RK73FB2A473J RK73FB2A101J RK73FB2A392J RK73FB2A682J	CHIP R CHIP R CHIP R CHIP R CHIP R	330K 47K 100 3.9K 6.8K	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W
R26 R27 R28 R29 R30 ,31			RK73FB2A155J RK73FB2A223J RK73FB2A684J RK73FB2A105J RK73FB2A124J	CHIP R CHIP R CHIP R CHIP R CHIP R	1.5M 22K 680K 1.0M 120K	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W
R32 R33 R34 R35 R36			RK73FB2A155J RK73FB2A514J RK73FB2A823J RK73FB2A104J RK73FB2A223J	CHIP R CHIP R CHIP R CHIP R CHIP R	1.5M 510K 82K 100K 22K	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W
R37 R38 R39 R40 R41 ,42			RK73FB2A183J RK73FB2A104J RK73FB2A244J RK73FB2A184J RK73FB2A472J	CHIP R CHIP R CHIP R CHIP R CHIP R	18K 100K 240K 180K 4.7K	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W
R43 R44 R45 R46 R47			RK73FB2A562J RK73FB2A102J RK73FB2A104J RK73FB2A332J RK73FB2A103J	CHIP R CHIP R CHIP R CHIP R CHIP R	5.6K 1.0K 100K 3.3K 10K	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W
R48 R49 R50 R51 -53 R54			RK73FB2A332J RK73FB2A105J RK73FB2A104J RK73FB2A471J RK73FB2A472J	CHIP R CHIP R CHIP R CHIP R CHIP R	3.3K 1.0M 100K 470 4.7K	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W
R55 R56 R57 R58 VR1			RK73FB2A101J RK73FB2A6R8J RK73FB2A121J RK73FB2A6R8J R32-0049-05	CHIP R CHIP R CHIP R CHIP R SEMI FIXED VARIABLE RESISTOR	100 6.8 120 6.8	J 1/10W J 1/10W J 1/10W J 1/10W
VR2 VR3			R32-0048-05 R32-0049-05	SEMI FIXED VARIABLE RESISTOR SEMI FIXED VARIABLE RESISTOR		

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D1 -4			MA111	DIODE		
D5			DA204U	DIODE		
IC1			CXA1782BQ*1	ANALOGUE IC		
IC2			CXD2507AQ*1	MOS-IC		
IC3			BA6398FP	ANALOGUE IC		
Q1			2SC4081(R,S)	TRANSISTOR		
Q2			2SA1586(Y,GR)	TRANSISTOR		
Q3			2SA1611(M5,M6)	TRANSISTOR		
Q3 ,4			DTA124EUA	DIGITAL TRANSISTOR		
Q3			UN5112	DIGITAL TRANSISTOR		
MECHANISM (D40-1571-05)						
1	2B		A10-3325-08	CHASSIS		
3	2A		D10-3695-08	SHAFT(TABLE GUIDE)		
5	3A		D10-3696-08	SLED SHAFT		
6	1A		D12-0156-08	CAM		
7	1A		D13-1793-08	GEAR (P)		
10	2A		D13-1796-08	GEAR (A)(S)		
11	3A		D13-1797-08	GEAR (B)(RP)		
12	1A		D16-0713-08	BELT		
13	2A		D23-0328-08	BEARING		
15	2B		E40-8051-08	PIN CONNECTOR (PC BOARD)5P		
20	3A		G01-3969-08	SPRING (S) COMPRESSION		
25	3A		J02-1179-08	PUBBER VIBRATION		
26	3A		J02-1180-08	PUBBER VIBRATION		
27	1A		J18-5788-08	HOLDER (MG)(K) ASSY		
28	2A		J19-5769-08	HOLDER (BU) ASSY		
29	2B		J70-0995-08	PC BOARD LOADING		
30	3A		J90-0846-08	RING (LO)(S) CENTER		
31	2A		J99-0592-08	TABLE DISK		
BB	3A		N09-3345-08	SCREW (2.6X16)		
FF	2A		N87-3010-46	SCREW TAPPING (3X10)		
40	2B		S74-0075-08	SWITCH LEAF		
45	3B		T25-0061-08	PICKUP ASSY KSS-213C(R)		
46	2B		T42-0673-08	MOTOR ASSY LOADING		
47	3A		T42-0907-08	MOTOR CHASSIS ASSY(MB)		
48	3A		T42-0875-08	MOTOR GEAR ASSY(MB)		

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SPECIFICATIONS

CD player (DP-SE9)

Laser Semiconductor laser
Playing rotation 200 rpm ~ 500 rpm (CLV)
Frequency response 4 Hz ~ 20 kHz, ± 1.0 dB
Signal to noise ratio More than 100 dB
Dynamic range More than 95 dB
Total harmonic distortion Less than 0.004 % (at 1 kHz)
Channel separation More than 92 dB (at 1 kHz)
Wow & Flutter Unmeasurable Limit
Output level / impedance
Fixed 1.2 V / 1 kΩ
Digital output
Optical -15 dBm ~ -21 dBm
(wave length 660 nm)

General

Power consumption 10 W
Dimensions W : 213 mm
H : 97 mm
D : 249 mm
Weight (net) 2.2 kg

CD player (DP-SE7)

Laser Semiconductor laser
Playing rotation 200 rpm ~ 500 rpm (CLV)
Frequency response 4 Hz ~ 20 kHz, ± 1.0 dB
Signal to noise ratio More than 100 dB
Dynamic range More than 96 dB
Total harmonic distortion Less than 0.004 % (at 1 kHz)
Channel separation More than 92 dB (at 1 kHz)
Wow & Flutter Unmeasurable Limit
Output level / impedance
Fixed 1.2 V / 1 kΩ
Digital output
Optical -15 dBm ~ -21 dBm
(wave length 660 nm)

General

Power consumption 10 W
Dimensions W : 200 mm
H : 77 mm
D : 249 mm
Weight (net) 2.0 kg



1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
2. Sufficient performance may not be exhibited at extremely cold locations (where water freezes.).

Note:

Component and circuit are subject to modification to insure best operation under differing local conditions. This manual is based on Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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